

**CLAIM AMENDMENTS**

This listing of claims will replace all prior versions and listings of claims in the application.

**Listing of Claims**

1. (Currently Amended) A method of providing secure network management communications within a communication network, the communication network including a plurality of network elements wherein each network element generates and processes ~~adapted to generate and process~~ legacy network management messages in conformance with a legacy management system, the method comprising:

embedding a first legacy network management message within a first Simple Network Management Protocol (SNMP) message at a first network element;

transmitting the first SNMP message over the network to a second network element;

extracting the first legacy network management message from the first SNMP message at the second network element; and

transmitting the extracted first legacy network management message to a legacy agent.

2. (Previously Presented) The method of claim 1, further comprising:

transmitting the first SNMP message in conformance with a secure version of the SNMP.

3. (Previously Presented) The method of claim 2, further comprising:  
transmitting the first SNMP message in conformance with SNMP version 3 (SNMPv3).

4. (Previously Presented) The method of claim 1, wherein the legacy management system provides less security than the SNMP.

5. (Previously Presented) The method of claim 1, further comprising:  
generating the first legacy network management message at the first network element; and  
processing the generated first legacy network management message at the second network element.

6. (Previously Presented) The method of claim 5, further comprising:  
generating a second legacy network management message at the second network element in response to the first legacy network management message;

embedding the generated second legacy network management message within a second SNMP message at the second network element;

transmitting the second SNMP message over the network to the first network element;

extracting the second legacy network management message from the second SNMP message at the first network element; and

transmitting the extracted second legacy network management message to a legacy agent.

7. (Previously Presented) The method of claim 1, wherein the first network element is a management station and the second network element is a node.

8. (Previously Presented) The method of claim 1, wherein the first network element is a node and the second network element is a management station.

9. (Currently Amended) A network management system within a communication network, the communication network including a management station and a node, comprising:

a legacy interface at the management station ~~for generating~~ that generates a first legacy network management message in conformance with a legacy network management protocol;

a Simple Network Management Protocol (SNMP) initiator at the management station ~~for embedding~~ that embeds the first legacy network management message within a first SNMP message and ~~for transmitting~~ transmits the first SNMP message to the node;

an SNMP agent at the node ~~for receiving~~ that receives the first SNMP message and for extracting the first legacy network management message from the first SNMP message; and

a legacy agent at the node ~~for processing~~ that processes the extracted first legacy network management message in conformance with the legacy network management protocol.

10. (Currently Amended) The network management system of claim 9, wherein the SNMP initiator is ~~adapted to transmit~~ transmits the first SNMP message in conformance with a secure version of the SNMP.

11. (Currently Amended) The network management system of claim 10, wherein the SNMP initiator ~~is adapted to transmit~~ transmits the first SNMP message in conformance with SNMP version 3 (SNMPv3).

12. (Previously Presented) The network management system of claim 9, wherein the legacy network management protocol provides less security than the SNMP.

13. (Previously Presented) A Simple Network Management Protocol (SNMP) initiator at a management station within a communication network, the SNMP initiator comprising:

instructions for receiving a legacy network management message which conforms to a legacy network management protocol;

instructions for embedding the received legacy network management message within an SNMP message;

instructions for transmitting the SNMP message to a node within the communication network;

instructions for extracting the legacy network management message from the SNMP message; and

instructions for transmitting the extracted legacy network management message to a legacy agent.

14. (Previously Presented) The SNMP initiator of claim 13, wherein the legacy network management protocol provides less security than the SNMP.

15. (Previously Presented) A Simple Network Management Protocol (SNMP) agent at a node within a communication network, the SNMP agent comprising:

instructions for receiving a first SNMP message from a management station within a communication network;

instructions for extracting a first legacy network management message from the received first SNMP message, the first legacy network management message conforming to a legacy network management protocol; and

instructions for sending the extracted first legacy network management message to a legacy agent at the node.

16. (Previously Presented) The SNMP agent of claim 15, wherein the legacy network management protocol provides less security than the SNMP.

17. (Previously Presented) The SNMP agent of claim 15, further comprising:

instructions for receiving a second legacy network management message from the legacy agent;

instructions for embedding the received second legacy network management message within a second SNMP message; and

instructions for transmitting the second SNMP message to the management station.

18. (Previously Presented) The SNMP agent of claim 17, wherein the legacy network management protocol provides less security than the SNMP.

19. (New) The method of claim 1, further comprising:

passing an unsolicited legacy network management message from the legacy agent to a SNMP agent.

20. (New) The network management system of claim 9, wherein the legacy agent passes an unsolicited legacy network management message to the SNMP agent.